

## **Engineers- Who Both Design New Systems and Maintain Installed and Running Systems**

This department supports data acquisition systems at the experiments and laboratory R&D. Many of the engineers are designing new systems and modules while supporting installed and running systems. The department has 4 groups and a 3 ½ level structure – department head, group leaders, engineers and some technicians. Some technicians report to group leaders and some to a single engineer.

The Department head plans a boilerplate template for engineers to look something like this with a supervisory section optional.

**Goal 1. Provide office hours support of (XYZ) system modules for (HEP experiment).**

**Goal 2. Respond to requests for problem assistance from Equipment Support department within a day.**

- a. The response can include a solution, a request for time to look at the problem with or without the requestor or an equivalent acknowledgment. Provide for a backup person in your absence.

**Goal 3. Evaluate experiment requests for hardware/firmware changes to fix issues or add additional features in order to estimate costs and effort needed.**

- a. Straightforward requests needing less than 3 days of work and/or \$50 worth of parts should go ahead with an email notice to your supervisor. For more complex changes work with supervisor and department head to acquire resources and establish a priority and schedule.

**Goal 4. Design modules, adapters and electronic hardware as assigned by group leader.**

- a. For each new design project, fill out a goal sheet and discuss it with your supervisor. At the time the project is delivered to the user, complete the goal sheet and submit it to your supervisor.

**Goal 5. Maintain technical skills through vendor presentations, skill-building classes at the lab or outside, conference participation and/or formal schooling.**

- a. Maintain a yearly average of at least two opportunities for acquiring new information per year.